



STIC Search Report

EIC 3600

STIC Database Tracking Number: 107708

To: John Sotomayor
Location: 4D39
Art Unit : 3662
Thursday, May 26, 2005

Case Serial Number: 10/680875

From: Etelka R. Griffin
Location: EIC 3600
KNOX/4B68
Phone:571-272-4230

Etelka.griffin@uspto.gov

Search Notes

Pat#6300897

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#)
Terms: **patno=6300897** ([Edit Search](#))

347683 (09) 6300897 October 9, 2001

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6300897

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[Link to Claims Section](#)

October 9, 2001

Stabilization in a radar level gauge

APPL-NO: 347683 (09)

FILED-DATE: July 2, 1999

GRANTED-DATE: October 9, 2001

CORE TERMS: frequency, clock, gauge, radar, sample, tank, electronic, timer, measurement, controller ...

ENGLISH-ABST:

A radar gauge adapted to sense fluid level in a tank and including a radar gauge circuit in which radar transmission and level sampling are controlled by a transmit frequency and a sample frequency respectively. A first frequency separation between first and second frequencies is controlled by a control input. The first and second frequencies can be divided to generate the transmit and sample frequencies, separated by a second frequency separation. At least one frequency difference is evaluated and the evaluation used to generate the control input, stabilizing the first frequency difference, and to correct the gauge output.

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#)

Terms: **patno=6300897** ([Edit Search](#))

View: **Custom**

Segments: Abst, Date, English-abst, Granted-date, Reissue-comment

Date/Time: Thursday, May 26, 2005 - 10:35 AM EDT

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No Documents Found!

Patent Cases from Federal Courts and Administrative Materials

No documents were found for your search (6300897 or 6,300,897).
Click the "Edit Search" button below to try again. You may want to try one or more of the following:

- Check for spelling errors.
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No Documents Found!

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Click the "Edit Search" button below to try again. You may want to try one or more of the following:

- Check for spelling errors.
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1 / 1 PLUSPAT - @QUESTEL-ORBIT - image

Patent Number :

US6300897 B1 20011009 [US6300897]

Title :

(B1) Stabilization in a radar level gauge

Patent Assignee :

(B1) ROSEMOUNT INC (US)

Patent Assignee :

Rosemount Inc., Eden Prairie MN [US]

Inventor(s) :

(B1) KIELB JOHN A (US)

Application Nbr :

US34768399 19990702 [1999US-0347683]

Priority Details :

US34768399 19990702 [1999US-0347683]

Intl Patent Class :

(B1) G01S-013/08

EPO ECLA Class :

G01F-023/284

US Patent Class :

ORIGINAL (O) : 342124000; CROSS-REFERENCE (X) : 342082000 342085000

Document Type :

Corresponding document

Citations :

US4044353; US4737791; US4847623; US5563605; US5651286; US5659321;

US5672975; US5701006; US5851083; US6072427; US6087978; US6107957;

US6130637; US6137438; DE29815069 U; WO9814763

"Smart Transmitter Using Microwave Pulses to Measure the Level of Liquids and Solids in Process Applications," H. Lang et al., OISA, pp. 731-742 (1993).

Electronics Designer's Handbook, 2nd Edition, Giacoletto, p. 25-10 (1977).

Publication Stage :

(B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

Abstract :

A radar gauge adapted to sense fluid level in a tank and including a radar gauge circuit in which radar transmission and level sampling are controlled by a transmit frequency and a sample frequency respectively. A first frequency separation between first and second frequencies is controlled by a control input. The first and second frequencies can be divided to generate the transmit and sample frequencies, separated by a second frequency separation. At least one frequency difference is evaluated and the evaluation used to generate the control input, stabilizing the first frequency difference, and to correct the gauge output.

Update Code :

2001-42

1 / 1 LGST - @EPO

Patent Number :

US6300897 B1 20011009 [US6300897]

Application Number :

US34768399 19990702 [1999US-0347683]

Action Taken :

20040810 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20031007

Update Code :

2004-34

1 / 1 CRXX - @CLAIMS/RRX

Patent Number :

6,300,897 A 20011009 [US6300897]

Patent Assignee :

Rosemount Inc

Actions :

20031007 REISSUE REQUESTED

ISSUE DATE OF O.G.: 20040810

REISSUE REQUEST NUMBER: 10/680875

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3662

Reissue Patent Number:

1 / 1 INPADOC - @INPADOC

Patent Number :

US 6300897 BA 20011009 [US6300897]

Title :

STABILIZATION IN A RADAR LEVEL GAUGE

Inventor(s) :

KIELB JOHN A [US]

Patent Assignee (Words) :

ROSEMOUNT INC [US]

Application Details :

US 347683/99-A 19990702 [1999US-0347683]

Priority Details :

US 347683/99-A 19990702 [1999US-0347683]

Intl. Patent Class. :

G01S-013/08

1 / 1 LGST - @EPO

Patent Number :

US6300897 B1 20011009 [US6300897]

Application Number :

US34768399 19990702 [1999US-0347683]

Action Taken :

20040810 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20031007

Update Code :

2004-34

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 Structured Data
 Custom Data
 BFS Data
 Local Data
 File
 Data
 Image
 Text
 HTML

[illegible]

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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L9	14	3 and @ad<="19990702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:05
L10	20	8 and @ad<="19990702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:08
L11	15	10 not 9	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:05
L12	1840	((342/124) or (342/135) or (342/195) or (342/82) or (342/93) or (342/84) or (342/85) or (342/86) or (342/87) or (342/88)). CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 11:07
L13	756	12 and @ad<="19990702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:08
L14	53	13 and @pd>="20010301"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:11

L15	53	(US-6279851-\$ or US-6570526-\$ or US-6198427-\$ or US-6400310-\$ or US-6246358-\$ or US-6384770-\$ or US-6486826-\$ or US-6320532-\$ or US-6300897-\$ or US-6549158-\$ or US-6208285-\$ or US-6239741-\$ or US-6232913-\$ or US-6232912-\$ or US-6225943-\$ or US-6211812-\$ or US-6255985-\$ or US-6268821-\$ or US-6411252-\$ or US-6255986-\$ or US-6373428-\$ or US-6417797-\$ or US-6469662-\$ or US-6204798-\$ or US-6377201-\$ or US-6252538-\$).did. or (US-6211807-\$ or US-6198424-\$ or US-6208283-\$ or US-6204800-\$ or US-6204799-\$ or US-6243036-\$ or US-6208284-\$ or US-6275187-\$ or US-6246365-\$ or US-6420994-\$ or US-6420995-\$ or US-6204801-\$ or US-6275180-\$ or US-6266004-\$ or US-6232910-\$ or US-6297763-\$ or US-6894639-\$ or US-6222481-\$ or US-6201496-\$ or US-6229475-\$ or US-6239739-\$ or US-6288775-\$ or US-6259515-\$ or US-6288777-\$ or US-6201819-\$ or US-6385266-\$ or US-6272446-\$).did.	USPAT	OR	ON	2005/05/26 11:11
L16	20	(RADAR AND GAUGE AND LEVEL) AND (SECOND ADJ3 FREQUENCY) AND (FIRST ADJ3 FREQUENCY) AND CLOCK	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/26 11:11
L17	1	L16 and 15	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:11
S1	954	((342/124) or (342/135) or (342/195) or (342/82) or (342/93) or (342/84) or (342/85) or (342/86) or (342/87) or (342/88)). CCLS.	USPAT; USOCR	OR	OFF	2001/03/19 09:42
S2	954	((342/124) or (342/135) or (342/195) or (342/82) or (342/93) or (342/84) or (342/85) or (342/86) or (342/87) or (342/88)). CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 11:07
S3	11	(RADAR AND GAUGE AND LEVEL) AND (SECOND ADJ3 FREQUENCY) AND (FIRST ADJ3 FREQUENCY) AND CLOCK	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/26 11:02

S4	11	(RADAR AND GAUGE AND LEVEL) AND (SECOND ADJ3 FREQUENCY) AND (FIRST ADJ3 FREQUENCY) AND CLOCK	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2001/03/19 09:40
S5	954	((342/124) or (342/135) or (342/195) or (342/82) or (342/93) or (342/84) or (342/85) or (342/86) or (342/87) or (342/88)). CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 11:07
S6	16	(RADAR AND GAUGE AND LEVEL) AND (SECOND ADJ3 FREQUENCY) AND (FIRST ADJ3 FREQUENCY) AND CLOCK	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:03
S7	857	((342/124) or (342/135) or (342/195) or (342/82) or (342/93) or (342/84) or (342/85) or (342/86) or (342/87) or (342/88)). CCLS.	USPAT; USOCR	OR	OFF	2001/03/19 09:35
S8	396	RADAR AND GAUGE AND LEVEL	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2000/06/13 08:28
S9	39977	FIRST ADJ3 FREQUENCY	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2000/06/13 08:38
S10	41458	SECOND ADJ3 FREQUENCY	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2000/06/13 08:53
S11	400545	CLOCK	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2000/06/13 08:56
S12	13	(RADAR AND GAUGE AND LEVEL) AND (SECOND ADJ3 FREQUENCY) AND (FIRST ADJ3 FREQUENCY) AND CLOCK	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2001/03/19 09:36
S13	10	(RADAR AND GAUGE AND LEVEL) AND (SECOND ADJ3 FREQUENCY) AND (FIRST ADJ3 FREQUENCY) AND CLOCK	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/26 11:01
S14	927	((342/124) or (342/135) or (342/195) or (342/82) or (342/93) or (342/84) or (342/85) or (342/86) or (342/87) or (342/88)). CCLS.	USPAT; USOCR	OR	OFF	2001/03/19 09:36

S15	15	(RADAR AND GAUGE AND LEVEL) AND (SECOND ADJ3 FREQUENCY) AND (FIRST ADJ3 FREQUENCY) AND CLOCK	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/26 11:02
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SEARCH NOTES FOR EAST AND IEEE AND INSPEC AND IP.COM

SERIAL NUMBER

10680875

EAST SEARCH

EAST: search history attached

Search terms:

IEEE SEARCH

Search terms:

((radar <and> level) <and> (second <and> first <and> frequency) <and> clock <and> fluid<in>metadata)

1. South China Sea internal tide/internal waves-impact on the temporal variability of horizontal array gain at 276 Hz

Orr, M.H.; Pasewark, B.H.; Wolf, S.N.; Lynch, J.F.; Schroeder, T.; Ching-Sang Chiu;
Oceanic Engineering, IEEE Journal of
Volume 29, Issue 4, Oct. 2004 Page(s):1292 - 1307

2. Proceedings of the 2001 American Control Conference. (Cat. No.01CH37148)

American Control Conference, 2001. Proceedings of the 2001
Volume 1, 25-27 June 2001

3. Applications using a low-cost baseband pulsed microwave radar sensor

Duzdar, A.; Kompa, G.;
Instrumentation and Measurement Technology Conference, 2001. IMTC 2001.
Proceedings of the 18th IEEE
Volume 1, 21-23 May 2001 Page(s):239 - 243 vol.1

4. Some questions of scale in simulation, and a few answers

Kester, J.E.;
Aerospace and Electronics Conference, 1992. NAECON 1992., Proceedings of the IEEE
1992 National
18-22 May 1992 Page(s):610 - 616 vol.2

5. Position measurements with radiosondes

Tug, H.;
Oceanic Engineering, IEEE Journal of
Volume 14, Issue 2, April 1989 Page(s):208 - 210

6. Programming a VIPER

Buckley, T.F.; Jesty, P.H.;
Computer Assurance, 1989. COMPASS '89, 'Systems Integrity, Software Safety and
Process Security', Proceedings of the Fourth Annual Conference on
19-23 June 1989 Page(s):84 - 92

INSPEC SEARCH

Search terms:

(RADAR and LEVEL) and (SECOND and FIRST and FREQUENCY) and CLOCK
(RADAR and LEVEL) and (SECOND and FIRST and FREQUENCY) and LEVEL
(RADAR and LEVEL) and (SECOND and FIRST and FREQUENCY) and FLUID

INSPEC . 1969 to date (INZZ)

Landmine detection with GPR using super resolution signal processing algorithm.

Author(s)

Shrestha.S.M; Arai.I; Tomizawa.Y; Ed. by Slob.E; Yarovoy.A; Rhebergen.J.

Source

Proceedings of the Tenth International Conference on Ground Penetrating *Radar*, Vol.2, Delft, Netherlands,

21.24 June 2004.

Sponsors: TNO:FEL, Geophysical Survey Syst., Inc., or+D *Radar.AS*, Allied Associates, Ingegneria dei

Sistemi.SPA, Mala Geoscience, *Radar* Syst. Inc., Roadscanners, Sensors & Software, T&A Survey.

In: p.705.8 Vol.2, 2004.

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SMOS: analysis of perturbing effects over land surfaces.

Author(s)

Kerr.Y.H; Secherre.F; Lastenet.J; Wigneron.J.P.

Source

IGARSS 2003. 2003 IEEE International Geoscience and Remote Sensing Symposium.

Proceedings, vol.2,

Toulouse, France, 21.25 July 2003.

In: p.908.10 vol.2, 2003.

COPYRIGHT BY Inst. of Electrical Engineers, Stevenage, UK

Dual.antenna impulse *radar* for improved detection of buried land mines.

Author(s)

Brunzell.H; Ericsson.A.

Source

Detection and Remediation Technologies for Mines and Minelike Targets III, Orlando, FL, USA, 13.17 April

1998.

Sponsors: SPIE.

In: Proceedings.of.the.SPIE.The.International.Society.for.Optical.Engineering (USA), vol.3392, pt.1.2, p.725.34, 1998.

COPYRIGHT BY Inst. of Electrical Engineers, Stevenage, UK

IP.COM SEARCH

Search terms:

(RADAR and LEVEL) and (SECOND and FIRST and FREQUENCY) and CLOCK

Result # 1 Relevance: ○○○○○○



PREVIEW
this document

Anti-jamming system for tracking and surveillance radar

12-Sep-2000

IPCOM000001028D

English (United States)

A radar ECCM system for degrading the effect that a standoff noise jammer has on a radar receiving site that is tracking an incoming aerial target. The system effectively removes from the mainlobe of the beam emanating from the site the component of random noise contained in ...

Result # 2 Relevance: ○○○○○○



PREVIEW
this document

Infrared coherent optical sensor

12-Sep-2000

IPCOM000000928D

English (United States)

A dual-beam amplitude-modulated laser transmitter/receiver suitable for laser-radar applications is scalable to high powers because there is no active modulator element that the laser beam passes through. The transceiver comprises a laser source with two separate independent ...

Result # 3 Relevance: ○○○○○○



PREVIEW
this document

DCN local-network protocols (RFC0891)

1983-12-01

IPCOM000003940D

English (United States)

This document describes the local-net architecture and protocols of the Distributed Computer Network (DCN), a family of local nets based on Internet technology and an implementation of PDP11-based software called the Fuzzball. DCN local nets have been in operation for about ...

Result # 4 Relevance: ○○○○○○



PREVIEW
this document

ECM preprocessor or tracker using multi-processor modules

12-Sep-2000

IPCOM000000509D

English (United States)

The tracking apparatus uses multi-processor modules for predicting in real time the parametric behaviour of radar signals to be jammed, as part of an electronic countermeasures system. The tracker system is partitioned into three board (module) types--(1) a subsystem request ...

Result # 5 Relevance: ○○○○○○



PREVIEW
this document

CCD transversal filter using weighted input

12-Sep-2000

IPCOM000000605D

English (United States)

An analog transversal filter includes a charge transfer delay line, including a plurality of cells for storing electrical charge, and a multiphase clock to transfer electrical charge from cell to cell through the delay line. A plurality of injection electrodes are connected ...

Result # 6 Relevance: ○○○○○○



PREVIEW
this document

Closed loop binary digital communication system

12-Sep-2000

IPCOM000000062D

English (United States)

A closed loop system for communication of binary data utilizes master or a sources and slave or data sink stations, each including a transmit buffer, a three-state transmitter, a receiver, a comparator, a three-state receiver, a receive buffer, a timer, a filter and a local ...

Result # 7 Relevance: ○○○○○○



② ENHANCED OVERCURRENT PROTECTION SYSTEM

26-Nov-2002 IPCOM000010400D

English (United States)

② Existing "soft hiccup" overcurrent protection circuits do not allow a power controller to recover from an overcurrent condition (even if the overcurrent condition has been cleared), unless the system is restarted by completely discharging the soft start capacitor. As an ...

Displaying page 1 of 1 < BACK | NEXT >

Search terms:

(RADAR and LEVEL) and (SECOND and FIRST and FREQUENCY) and FLUID

Result # 1 Relevance: ○○○○○○



Electrically small cavity antenna

12-Sep-2000 IPCOM000001211D

English (United States)

A supersonic aircraft or missile broad bandwidth antenna is provided. This antenna is constructed into a cavity created in the fuselage or wing of the aircraft and covered with a radome for flush mounting. The cavity comprises side walls and a bottom constructed of ...